



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,443	01/09/2002	John W. Barrus	20412-06488	3265
758	7590	02/24/2006	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			PITARO, RYAN F	
			ART UNIT	PAPER NUMBER
			2174	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/043,443	BARRUS ET AL.
	Examiner Ryan F. Pitaro	Art Unit 2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 November 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-65 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-65 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Claims 1-65 have been examined.

Inventorship

In view of the papers filed 11/21/2005, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by adding Marko Balabanovic as an inventor.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of Office records to reflect the inventorship as corrected.

Response to Amendment

2. This communication is responsive to Amendment B, filed 11/21/2005. Claims 1-65 are pending in this application. Claims 1,22,23,29,34,44,50,55,57,62 are independent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5,9-21,29-33,62-64 are rejected under 35 U.S.C. 102(b) as being unpatentable by Moorby et al ("Moorby", US 5,892,507).

As per claim 1, Moorby discloses a method for generating one or more audio elements, the method comprising the steps of: receiving user input (Column 2 lines 43-48), creating a first audio element, with an audio data field, in response to the user input (Figure 3); displaying a visual representation of the first audio element located spatially on a two dimensional layout capable of displaying non-audio elements (Column 2 lines 43-48), wherein a display position of the visual representation is independent of the audio data field in the first audio element and controllable by a user (Column 3 lines 1-38).

As per claim 2, which is dependent on claim 1, Moorby discloses a method wherein the step of receiving user input includes receiving control signals, and wherein the step of creating a first audio element creates a data structure having a unique identification number field, and a spatial location field (Column 4 lines 6-52).

As per claim 3, which is dependent on claim 1, Moorby discloses a method wherein the step of receiving user input includes receiving an audio input signal, and wherein the step of creating the first audio element includes storing representations of the audio input signal in the audio data field of the first audio element (Column 4 lines 6-52).

As per claim 4, which is dependent on claim 3, Moorby discloses a method wherein the step of displaying includes an audio indicator within the visual representation of the first audio element, the audio indicator corresponding to the audio input signal (Column 4 lines 31-52).

As per claim 5, which is dependent on claim 4, Moorby discloses a method wherein the step of displaying increases the size of the visual representation of the first audio element and the audio indicator based upon a duration of the audio input signal (Column 11 lines 46-57).

As per claim 9, which is dependent on claim 3, Moorby discloses a method wherein the step of displaying includes displaying a control button, the control button beginning the logging of the audio input signal if the audio input signal is not being logged, and the control button ending the logging of the audio input signal if the signal is being logged (Column 9 lines 23-31).

As per claim 10, which is dependent on claim 3, Moorby discloses a method wherein the step of receiving user input includes receiving a signal indicating an ordinal value, and wherein the step of creating a first audio element includes storing the ordinal value in an ordinal field of the first audio element (Column 8 lines 26-36, Column 10 lines 8-21).

As per claim 11, which is dependent on claim 1, Moorby teaches method further comprising the steps of: receiving additional user input (Column 10 lines 7-21); creating a second audio element in response to the additional user input (Column 10 lines 7-21); displaying a visual representation of the second audio element located spatially on a

two-dimensional layout, wherein the display position of the visual representation of the second audio element is independent of a temporal sequence or relationship to the first audio element (Figure 17).

As per claim 12, which is dependent on claim 11, Moorby discloses a method further comprising the steps: of creating a link between the first audio element and the second audio element; and displaying a visual representation of the link as a connector between the visual representation of the first audio element and the visual representations of the second audio element (Column 8 lines 26-35, Column 10 lines 7-21, Figure 9).

As per claim 13, which is dependent on claim 12, Moorby discloses a method wherein the step of creating a link includes the steps of: creating a link object; storing a link to the first audio element and an interval within the first audio element in the linking object; and storing a link to the second audio element and an interval within the second audio element in the linking object (Column 8 lines 26-35, Column 10 lines 7-21, Figure 9).

As per claim 14, which is dependent on claim 1, Moorby discloses a method wherein the step of receiving user input comprises receiving an identification of a media object while receiving an audio input signal; and wherein the method further comprises the step of creating a link between the identified media object and the first audio element (Column 7 line 52 – Column 8 line 36, Column 10 lines 7-21).

As per claim 15, which is dependent on claim 14, Moorby discloses a method wherein the identification of a media object includes a range in the media object (Figure

9), and the method further comprise the step of determining a range in the first audio element corresponding to when the identification of the media object was received (Column 11 lines 33-45), and wherein the step of creating a link stores a reference to the identified media object, a reference to the first audio element, the range in the media object and the range in the first audio element (Column 8 lines 26-36, Column 10 lines 7-21).

As per claim 16, which is dependent on claim 12, Moorby discloses a method wherein the step of displaying includes displaying a representation of the link (Figure 9).

As per claim 17, which is dependent on claim 1, Moorby discloses a method wherein the step of creating the first audio element includes the step of assigning the audio element an ordinal value (Column 8 lines 26-36)

As per claim 18, which is dependent on claim 17, Moorby discloses a method wherein the step of assigning the audio element the ordinal value sets the ordinal value to be one plus the highest ordinal value for an existing element (Column 8 lines 26-36, sequence).

As per claim 19, which is dependent on claim 17, Moorby teaches a method wherein the step of displaying reflects ordinal values by showing connecting lines between successive audio elements (Figure 16).

As per claim 20, which is dependent on claim 1, Moorby teaches a method further comprising the steps of creating a link between the first audio element and a media object; and displaying a visual representation of the link as a connector between

the visual representation of the first audio element and a visual representation of the media object (Column 8 lines 9-49).

As per claim 21, which is dependent on claim 20, Moorby teaches a method, wherein the step of creating a link includes the steps of creating a link object; storing a reference to the first audio element and an interval within the first audio element in the linking object and storing a reference to the media object and an interval within the media object in the linking object (Column 8 lines 26-35, Column 10 lines 7-21).

As per independent claim 29, Moorby teaches a method of associating audio elements with a media object, the method comprising the steps of receiving user input identifying a media object and an audio element to be associated (Column 8 lines 1-50); creating a link object (Column 8 lines 1-50); storing a reference to the media object and the audio element in the link object (Column 8 lines 1-50); and displaying a representation of the link object with the representations of the media object and the audio element (Column 8 lines 1-50).

As per claim 30, which is dependent on claim 29, Moorby discloses a method comprising the steps of receiving user input identifying a range in the audio element; and storing the range in the link object (Column 8 lines 26-36, Column 10 lines 7-21).

As per claim 31, which is dependent on claim 30, Moorby discloses a method wherein the step of displaying further comprises displaying a visual representation of the audio element; displaying a visual representation of the media object; and displaying a connector between the visual representation of the audio element at the range and the visual representation of the media object (Column 8 lines 1-50).

As per claim 32, which is dependent on claim 29, Moorby discloses a method further comprising the steps of receiving user input identifying a range in the media object; and storing the range in the link object (Column 8 lines 26-36, Column 10 lines 7-2).

As per claim 33, which is dependent on claim 32, Moorby discloses a method wherein the step of displaying further comprises displaying a visual representation of the audio element (Column 8 lines 1-50); displaying a visual representation of the media object (Column 8 lines 1-50); and displaying a connector between the visual representation of the audio element and the range in the visual representation of the media object (Column 8 lines 1-50).

As per independent claim 62, Moorby discloses a method for displaying media objects in conjunction with outputting audio data, the method comprising the steps of: identifying an audio element (Column 2 lines 43-48); retrieving audio data for the identified audio element (Column 2 lines 43-48); outputting the retrieved audio data (Column 2 lines 43-48); retrieving a link object referring to the identified audio element (Column 8 lines 1-50); retrieving a media object referred to by the link object (Column 8 lines 1-50); and displaying the media object (Column 8 lines 1-50).

As per claim 63, which is dependent on claim 62, Moorby discloses a method wherein the link object identifies an audio range in the audio data of the audio element to which it refers, and wherein the step of displaying is performed when an audio range specified in the link object is reached (Figure 9).

As per claim 64, which is dependent on claim 62, Moorby discloses a method wherein the link object identifies a range in the media object to which it refers, and wherein the step of displaying, displays the range in the media object (Figure 9).

5. Claims 44,50,51,55,57,58 are rejected under 35 U.S.C. 102(b) as being anticipated by Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per independent claim 44, sfv45 discloses a method of joining audio elements comprising: receiving user input identifying first and second audio elements to be joined (Figure 2 items 225 & 235); creating a new audio element (Figure 2 item 215); retrieving information from the first audio element and storing it in the new audio element (Figure 3 item 300); retrieving information from the second audio element and storing it in the new audio element (Figure 3 item 300); and deleting the first and second audio elements (Figure 3).

As per independent claim 50, sfv45 discloses a method of joining audio elements comprising: receiving user input identifying a first and second audio elements to be joined (Figure 4a items 410, 415); retrieving information from the second audio element (Figure 4a item 415); storing the retrieved information from the second audio element in the first audio element (Figure 4b item 410); and deleting the second audio element (Figure 4b).

As per claim 51, which is dependent on claim 50, sfv45 discloses a method wherein the information from the second audio element includes an audio data signal (Figure b item 410).

As per independent claim 55, sfv45 discloses a method of splitting an audio element, the method comprising the steps of receiving user input identifying an original audio element to be split (Figure 5a item 540), the original audio element containing a beginning point, and an ending point (start and end of the .wav), and a splitting point (Figure 5a item 545), the splitting point situated in between the beginning point and the ending point; creating a first audio element (Figure 5a item 550); creating a second audio element (Figure 5a item 555); retrieving audio data from the original audio element, the first audio data retrieved between the beginning point and the splitting point (Figure 5b item 550); retrieving second audio data from the original audio element, the second audio data retrieved between the splitting point and the ending point (Figure 5b item 555); storing first audio data in the first audio element Figure 5b item 550; storing second audio data in the second audio element; and deleting the original audio element (Figure 5b).

As per independent claim 57, sfv45 discloses a method of splitting an audio element, the method comprising the steps of receiving user input identifying an original audio element to be split (Figure 6a item 600), the original audio element containing a beginning point, and an ending point (beginning and end of the .wav), and a splitting point (Figure 6a item 610); creating a new audio element (Figure 6a item 630); retrieving audio data from the original element (Figure 6a item 620); the audio data

retrieved between the splitting point and the ending point of the original audio element, storing audio data from the splitting point in the original audio element to the end in the new audio element (Figure 6b item 630); and deleting the retrieved audio data from the original audio element (Figure 6b item 600).

As per claim 58, which is dependent on claim 57, sfv45 discloses a method comprising the step of displaying visual representations of the original audio element and the new audio element located spatially on a two-dimensional layout (Figure 6b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorby et al ("Moorby", US 5,892,507).

As per claim 65, which is dependent on claim 62, Moorby fails to disclose a separate window. However, Official notice is taken that separate windows for displaying are well known in the art. Therefore it would have been obvious to an artisan at the

time of the invention to combine the method of Moorby with the current teaching.

Motivation to do so would have been to make the interface more appealing with less clutter in one window.

7. Claims 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winamp ("Winamp", Winamp version 2) in view of Moorby et al ("Moorby", US 5,892,507).

As per independent claim 22, Winamp teaches a method for deleting audio elements comprising the steps of: receiving user input (Figure 1 item 21; *highlight element*). Responsive to user input, identifying an audio element to be deleted (Figure 1 item 32); determining a visual representation corresponding to the identified audio element (Figure 1 item 21); removing the determined visual representation from display (figure 1 item 21 and Figure 2); deleting the identified audio element from memory (Figure 2 where element 21 is not present); determining audio elements that have an ordinal value greater than the identified audio element (Figure 2); and retrieving and decrementing the ordinal value of each audio element determined to have an ordinal value greater than the identified audio element (Figure 2; *12 songs 1-12 instead of 13 in Figure 1*). Winamp fails to distinctly point out graphical representations including an audio indicator and audio gauge. However, Moorby teaches audio elements having a graphical component including an audio indicator and audio gauge (Figure 16).

Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Winamp with the current teaching of Moorby. Motivation to do so would have been to make the interface more appealing by visually representing along a unidirectional path line.

As per claim independent claim 23, Winamp discloses a method for reordering two or more audio elements, the method comprising the steps of receiving user input (*drag and drop*, Figure 3 item 113; *shuffle*); identifying a chosen set of audio elements to be reordered from the user input; identifying a new order for the chosen set of audio elements based on the user input such that the audio elements are ordered spatially independent of each other (Figure 3; *wherein a new order can be seen by numbers on left as apposed to original track numbers item 116 wherein elements are spatially independent and can be moved to any position in the list*) determining a lowest ordinal value for the chosen set of audio elements; modifying an ordinal value of each of audio element in the chosen set of audio elements beginning with the lowest ordinal value and using the new order; and updating display of chosen set of audio elements to reflect the modified ordinal values (Figure 3 item 116; *wherein the new order is seen*). Winamp fails to distinctly point out each element having a graphical component. However, Moorby teaches audio elements having a graphical component (Figure 16). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Winamp with the current teaching of Moorby. Motivation to do so would have been to make the interface more appealing by visually representing along a unidirectional path line.

As per claim 24, which is dependent on claim 23, Winamp-Moorby discloses a method of further comprising the step of storing the modified ordinal values for the chosen set of audio elements (Moorby, Column 10 lines 7-21).

As per claim 25, which is dependent on claim 23, Winamp-Moorby discloses a method wherein the step of determining a lowest ordinal value for the chosen set of audio elements further comprising the steps of retrieving each audio element in the chosen set; retrieving an ordinal value for each audio element in the chosen set from its audio element (figure 3 item 116); and comparing the retrieved ordinal values to determine a lowest value (Winamp Figure 3 item 116; *wherein 10.JackJohnson 11-F-StopBlues.MP3 is the lowest ordinal value*).

As per claim 26, which is dependent on claim 23, Winamp-Moorby discloses a method wherein the user input includes selecting a reordering mode and moving a cursor over visual representations corresponding to audio elements using a pointing device (Figure 4 item 412; *current value is 1*), and wherein the chosen set is determined by the visual representations over which the cursor crosses, and the new order is an order in which the visual representations are crossed (Winamp Figure 4b item 414; *changes ordinal value when cursor crosses, causing new order now of value 8*).

As per claim 27, which is dependent on claim 26, Winamp-Moorby discloses a method wherein the method further comprises a step of displaying a feedback as to which visual representations the cursor has been moved across and the order in which the cursor was moved across them (Winamp Figure 4b; *wherein all elements which were crossed by cursor have new ordinal values 1-8*).

As per claim 28, which is dependent on claim 23, Winamp-Moorby discloses The method of claim 23, further comprising the steps of: determining whether there are any audio elements not chosen for reordering; if there are audio elements not chosen for reordering, identifying any unselected audio elements (Winamp Figure 4a item 419;2-13); determining an ordinal value of each unselected audio element (Winamp Figure 4b); modifying ordinal values of the unselected audio elements that have an ordinal value greater than the lowest ordinal value to a modified order (Winamp Figure 4b;wherein moving element 414 to position 8 causes a shift of the unselected ones to precede 8); and updating display of the unselected audio elements to reflect the modified ordinal values (Winamp Figure 4b).

8. Claims 6-8,34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorby et al ("Moorby", US 5,892,507) in view of Capps ("Capps", US# 5,151,998).

As per claim 6, which is dependent on claim 4, Moorby fails to disclose a waveform. However, Capps discloses the method wherein the audio indicator is a waveform, a length of the waveform relating to a time measurement of the audio input signal and the height of the waveform relating to a measurement of energy or pitch in the audio input signal (Column 3 lines 28-29). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby with the teaching of Capps. Motivation to do so would have been to provide indication of the audio elements to make the elements visually appealing.

As per claim 7, which is dependent on claim 4, Moorby-Capps fails to distinctly point out colors in the graph relating to a measurement of energy. However, Official notice is taken that colors in the graph relating to a measurement of energy or pitch in the audio input signal is well known in the art examples of which can be seen in most commercial wave editors. Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby-Capps with the current teaching. Motivation to do so would have been to distinguish different levels of energy or pitch to allow for adjustment.

As per claim 8, which is dependent on claim 3, Moorby-Capps discloses a method wherein the step of displaying includes providing an audio gauge indicating the amplitude of the audio input signal (Capps, Column 4 lines 20-27).

As per independent claim 34, Moorby discloses a method of outputting audio signals, the method comprising the steps of: displaying a visual representation of at least one audio element located spatially on a two-dimensional layout (Figure 9), the visual representation of the audio element including an audio indicator (Figure 16); receiving user input (Column 2 lines 43-48); identifying a first audio element based on the user input (Column 2 lines 43-48); retrieving audio data for the identified audio element (Column 2 lines 43-48). Moorby fails to distinctly point out, but Capps teaches, displaying an audio indicator or outputting the retrieved audio data (Column 4 lines 5-6; *output to the display screen*) highlighting sections of the audio indicator corresponding to a temporal ranges for which audio output has been provided (Column 3 lines 8-13). Therefore it would have been obvious to an artisan at the time of the invention to

combine the method of Moorby with the teaching of Capps. Motivation to do so would have been to provide indication of the audio elements to make the elements visually distinguishable.

As per claim 35, which is dependent on claim 34, Moorby-Capps discloses a method wherein the audio indicator is a waveform, a length of the waveform relating to a time measurement of audio data and the height of the waveform relating to a measurement of energy of pitch in the audio (Capps, Column 3 lines 28-30).

Claim 36 is similar in scope to claim 7 and is therefore rejected under similar rationale.

9. Claims 37-43 rejected under 35 U.S.C. 103(a) as being unpatentable over Moorby et al ("Moorby", US 5,892,507) and Capps ("Capps", US# 5,151,998) in view of Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5).

As per claim 37, which is dependent on claim 34, Moorby -Capps fails to distinctly disclose highlighting being shading. However, sfv45 teaches a method wherein the highlighting is shading (Figure 1 item 35). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby -Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 38, which is dependent on claim 34, Moorby-Capps fails to disclose highlighting the waveform in bold. However, sfv45 teaches a method wherein the audio indicator is a waveform and highlighting is rendering the waveform in bold (Figure 1 item

35; *wherein bold is darkening the selection more than that of the non selecting).*

Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby-Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 39, which is dependent on claim 34, Moorby-Capps fails to disclose highlighting the waveform in a different color. However, sfv45 teaches a method wherein the audio indicator is a waveform and highlighting is rendering the waveform in bold (Figure 1 item 35; *wherein color of the selection is different from that of non selected in this case blue*). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby-Capps with the current teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 40, which is dependent on claim 34, Moorby-Capps teaches ordinal teaches a method wherein the step of displaying includes displaying a plurality of audio elements (Moorby, Figure 16), and wherein the method further comprises the steps of: determining an ordinal number for the first audio element (Moorby, Column 8 lines 26-35, Column 10 lines 8-38); determining whether there are any audio elements with an ordinal number greater than the ordinal number for the first audio element; identifying a second audio element with an ordinal number greater than the ordinal number for the first audio element; retrieving audio data for the second audio element; outputting the retrieved audio data for the second audio element (Column 8 lines 26-35, Column 10

lines 8-38). Moorby-Capps fail to distinctly point out highlighting sections of a waveform corresponding to a temporal range for which audio output has been provided. However, sfv45 teaches a method wherein highlighting sections of a waveform corresponding to a temporal range for which audio output has been provided (Figure 1 item 35). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified Moorby-Capps and the teaching of sfv45. Motivation to do so would have been to create a visual difference for the selection allowing the user to know what he/she is selecting.

As per claim 41, which is dependent on claim 40, the Moorby-Capps-sfv45 teaches a method wherein the steps of retrieving audio data and outputting the retrieved audio data are performed after all the audio data for the first audio element has been output (Moorby, Column 8 lines 26-35, Column 10 lines 8-38).

As per claim 42, which is dependent on claim 34, Moorby-Capps fails to distinctly point out a stop signal, which terminates output. However, sfv45 teaches a method further comprising the steps of: receiving a stop signal from the user; and terminating the outputting of the retrieved audio data (Figure 1 item 15). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby-Capps with the current teaching of sfv45. Motivation to do so would have been to give the user complete control over audio elements.

As per claim 43, which is dependent on claim 34, Moorby-Capps fails to disclose creating a new element signal. However, sfv45 teaches a method further comprising the

steps of receiving a create new audio element signal from the user; and terminating the outputting of the retrieved audio data (Figure 1 item 25). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Moorby-Capps with the current teaching of sfv45. Motivation to do so would have been to give the user complete control over audio elements.

10. Claims 45-49,52-54,59,60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5) in view of Winamp ("Winamp", Winamp version 2).

As per claim 45, which is dependent on claim 44, sfv45 does not distinctly point out ordinal values. However, Winamp teaches a method wherein the information from the first audio element includes an ordinal value (Figure 1 item 21). Therefore it would have been obvious to combine the method of sfv45 with the teaching of Winamp. Motivation to do so would have been to establish some organization so that songs can be played in a certain order.

As per claim 46, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of determining the ordinal value of the first audio element and using the determined ordinal value as the ordinal value for the new audio element (Figure 1; *wherein songs 2-13 have been added in succession and ordinal values have been assigned*).

As per claim 47, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of reducing by one the ordinal value of any audio

elements having ordinal values higher than that of the first audio element (Figure 4b item 414; wherein 1-7 have lower ordinal values when their ordinal values were higher previously).

As per claim 48, which is dependent on claim 44, sfv45 fails to distinctly point out the step of modifying the links. However, Official Notice is taken that modifying links, which associates with second elements to be associated with the new element is well known in the art an example of which is a hierarchical tree like structure. When an element of the tree like structure is moved or joined to another element all of its depending nodes move with the element adjusting accordingly. Therefore it would have been obvious to an artisan at the time of the invention to combine sfv45 with the current teaching. Motivation to do so would have been to keep the structure consistent to prevent it from having dangling nodes.

Claims 49,53,54 are similar in scope to that of claim 44 and are therefore rejected under similar rationale.

As per claim 52, which is dependent on claim 45, the modified sfv45 discloses a method further comprising the step of reducing by one the ordinal value of any audio elements having ordinal values higher than that of the first audio element (Figure 2).

As per claim 59, which is dependent on claim 57, the modified sfv45 discloses a method further comprising the steps of determining the ordinal value for the original audio element; storing a value of the determined ordinal value plus one as the ordinal value for the second audio element; and updating the display of the visual

representations of the original and new audio elements to reflect the stored ordinal values (Figure 2; *items 1-12 all with ordinal values 1 higher than its previous*).

As per claim 60, which is dependent on claim 59, the modified sfv45 teaches a method further comprising the steps of determining any audio elements having an ordinal value greater than the ordinal value for the original audio element; and increasing by one the ordinal values of those determined elements having ordinal values higher than that of the original element (Figure 2; *items 1-12 all with ordinal values 1 higher than its previous*).

11. Claims 56,61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sound Forge V4.5 ("sfv45", Sound Forge for Windows 95 and NT version 4.5) in view of Schuur et al ("Schuur", US# 5,504,853).

As per claim 56, which is dependent on claim 55, sfv45 fails to distinctly point out updating a link to the new object. However, Schuur teaches a method further comprising the steps of determining any links to audio data from the splitting point in the original audio element to the end; updating a link object to refer to the new audio object (Column 7 lines 16-17); and updating the display of the visual representations of the original audio element, the new audio element and the links to reflect the new association (Figure 4a; *wherein all links will still point to its original audio element*). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of sfv45 with the teaching of Schuur. Motivation to do so would have been keep consistency between links to retain the hierarchical structure.

Claim 61 is similar in scope to that of claim 56, and is therefore rejected under similar rationale.

Response to Arguments

Applicant's arguments with respect to claims 1-65 have been considered but are moot in view of the new ground(s) of rejection.

As for the arguments with respect to the Sound Forge reference, Sound Forge is a simple and cost effective method for joining and splitting audio elements and is well known in the art. The joining and splitting of the waveforms can be shown in the screenshots which were provided, these methods, which are well known in the audio editing art, are shown through cutting and pasting as pointed out. The screenshots provided are a displaying of the generating, splitting, and joining of audio elements and it is inherent that some user implementation went into making these elements, but is not feasible to show screenshots at each specific instance in time. The screenshots were made to show the capabilities of Sound Forge and one skilled in the art should be able to interpret them correctly.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm M-Th, and alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro
Art Unit 2174
Patent Examiner

RFP

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100